REWRITABLE OPTICAL DISC (A) (DVD_RTR_DISC)/1001 INNER SIDE 1006 OUTER SIDE 1007 LEAD-IN VOL. & FILE DATA AREA LEAD-OUT AREA 1002 MANAGER 1004 AREA 1005 (B) (EMBOSSED/ INFO. 1003 (REWRITABLE (REWRITABLE REWRITABLE (REWRITABLE DATA ZONE) DATA ZONE) DATA ZONE) DATA ZONE) AUDIO & VIDEO COMPUTER COMPUTER (C) DATA AREA 1009 DATA AREA 1010 DATA AREA 1008 **ANCHOR** CONTROL THUMB-PICTURE POINTER VIDEO AUD10 NAIL INFO. FOR CONT-**OBJECTS OBJECTS OBJECTS OBJECTS** 1011 ROL INFO. 1012 1013 1014 (RTR. IFO) 1016 1015 AV DATA PLAYBACK RECORDING EDIT THUMBNA I L CONTROL CONTROL CONTROL CONTROL CONTROL INFO. 1101 INFO. 1021 INFO. 1024 INFO. 1022 INFO. 1023 (RTR_VMG) PGC CELL VIDE0 VIDE0 ALLOC-PLAYBACK CONTROL TITLE SET ATION OBJECT (F) INFO. 1108 INFO. 1103 MAP TABLE INFO. 1106 INFO. 1107 (PGCI) (CI)(RTR_VMGI) (AVFIT) 1105

FIG. 1

ROOT DIRECTORY 1450

SUB DIRECTORY 1451

REWRITABLE TITLE SET RW_VTS 1452 (DVD_RTR DIRECTORY)

RTR=REAL TIME RECORDING

DATA FILES 1453

CONTROL INFORMATION 1011 = RW_VIDEO_CONTROL. IFO (RTR. IFO)

BACKUP OF CONTROL INFO. =RW_VIDEO_CONTROL.BUP

AV FILE 1401 (RTR DATA) = RW_OBJECT. OB

VIDEO OBJECT (RTR_MOV. VRO) 1012

PICTURE OBJECT (RTR_STO. VRO) 1013

AUDIO OBJECT (RTR_STA.VRO) 1014

THUMBNAIL OBJECT 1016

REWRITABLE ADDITIONAL INFO. 1454 = RW_ADD.DAT

SUB DIRECTORY 1451

VIDEO TITLE SET VIDEO_TS (OR VTS) 1455

AUDIO TITLE SET AUDIO_TS (OR ATS) 1456

SUB DIRECTORY FOR COMPUTER DATA STORAGE 1457

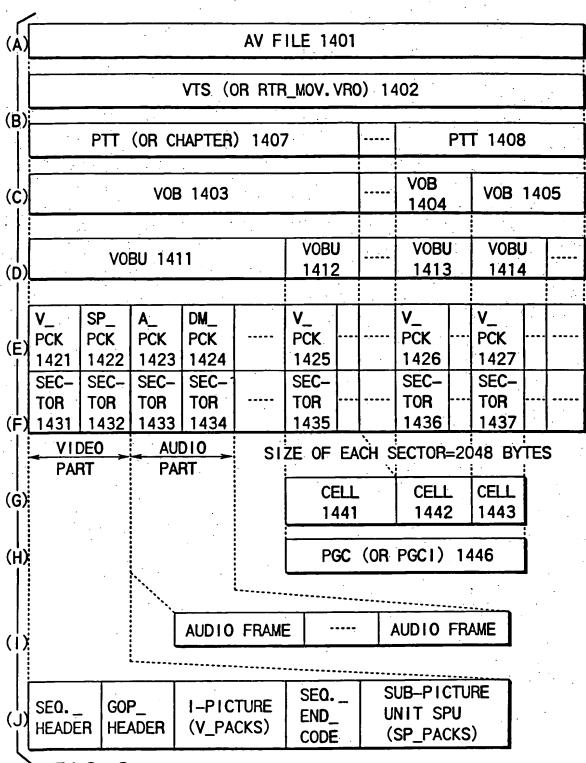


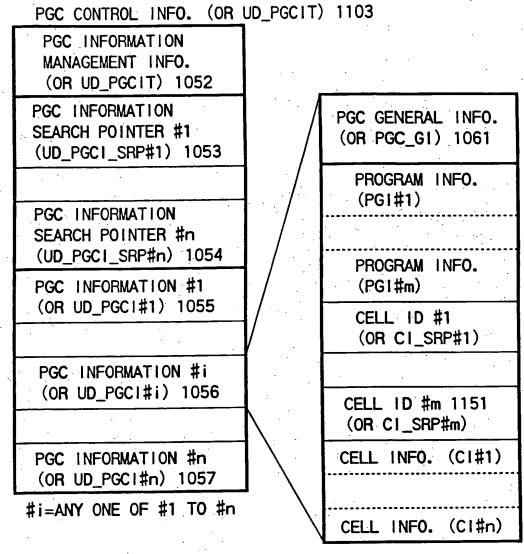
FIG. 3

	·	
3	1	LSNg
0B # (3)	XTEN #ε 1475	
>	ш	LSNf+1
DED	<u></u>	LSNf
ECORI AREA 1460	XTEN # ₹ 1470	
S. S	Щ	LSNe+1
2	F	LSNe
0B #: 1462	XTEN #β 1472	
>	ш	LSNd+1
8	 -	LSNd
0B # (2) 1464	XTEN #δ 1474	
>	ш	LSNc+1
-	·	LSNc
#1	ent a 71	
V0B	EXT # 14	LSNb+2
		LSNb+1
	·	LSNb
#3 () ()	ENT 7 73	
V0B (1	EXT # 4	LSNa+2
		LSNa+1
	VOB #1 VOB #3 VOB #2 UNRECORDED (2) AREA 1461 1464 1462 1460	VOB #3 (2) 1464 EXTENT #δ 1474

←SMALLER LOGICAL SECTOR NUMBER (LSN) LARGER LO ←INNER SIDE OF OPTICAL DISC 1001 OUTER SID

LARGER LOGICAL SECTOR NUMBER (LSN)→ OUTER SIDE OF OPTICAL DISC 1001→

•	·	
CONTENTS OF ALLOCATION	NUMBER OF EXTENTS IN UNRECORDED AREA 1601	1
MAP TABLE 1105	1ST ADR. (LSN) OF 1ST EXTENT IN UNRECORDED AREA 1606	e-a
DISTRIBUTION INFORMATION OF POSITIONS OF	SIZE (SECTORS) OF 1ST EXTENT IN UNRECORDED AREA 1614	f–e
UNRECORDED AREA 1621	NUMBER OF EXTENTS IN VOB #1 1602	1
DISTRIBUTION	1ST ADR. (LSN) OF 1ST EXTENT IN VOB #1 1607	b–a
INFORMATION OF POSITIONS OF	SIZE (SECTORS) OF 1ST EXTENT IN VOB #1 1615	c-b
RECORDED DATA AS TO VOB #1 1622	NUMBER OF EXTENTS IN VOB #2 1603	1
DISTRIBUTION	1ST ADR. (LSN) OF 1ST EXTENT IN VOB #2 1608	d–a
INFORMATION OF POSITIONS OF	SIZE (SECTORS) OF 1ST EXTENT IN VOB #2 1616	e-d
RECORDED DATA AS TO VOB #2 1623 DISTRIBUTION INFORMATION OF	NUMBER OF EXTENTS IN VOB #3 1604	3
	1ST ADR. (LSN) OF 1ST EXTENT IN VOB #3 1609	1
POSITIONS OF RECORDED DATA	SIZE (SECTORS) OF 1ST EXTENT IN VOB #3 1617	b-a
AS TO VOB #3 1624	1ST ADR. (LSN) OF 2ND EXTENT IN VOB #3 1610	с-а
	SIZE (SECTORS) OF 2ND EXTENT IN VOB #3 1618	d–c
	1ST ADR. (LSN) OF 3RD EXTENT IN VOB #3 1611	f-a
FIG. 5	SIZE (SECTORS) OF 3RD EXTENT IN VOB #3 1619	g–f



- *1> PGC INFORMATION (OR UD_PGCI) CAN DEFINE A GROUP OF ONE OR MORE PROGRAMS;
- *2> EACH PROGRAM CAN BE FORMED OF ONE OR MORE CELLS;
- *3> EACH CELL CAN BE SPECIFIED BY CELL ID (OR CI_SRP);
- *4> EACH CELL ID (OR CI_SRP) CAN INDICATE POSITION (OR START ADDRESS) OF CELL INFORMATION (OR CI);
- *5> EACH CELL INFORMATION (OR CI) CAN DETERMINE START TIME AND END TIME OF PRESENTATION OF CELL

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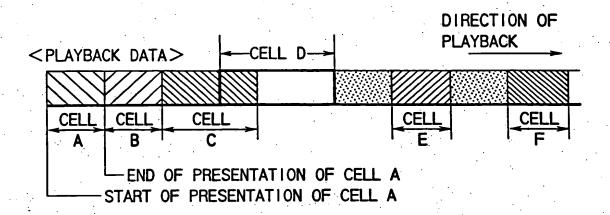


FIG. 7A

PGC INFORMATION (PGCI)

-						
	PGC#1	1081	PGC#2	1082	PGC#3	1083
	NUMBE CELLS		NUMBE CELLS	ER OF S=3	NUMBE CELLS	ER OF S=5
I	#1	CELL A	#1	CELL D	#1	CELL E
l	#2	CELL B	#2	CELL E	#2	CELL A
	#3	CELL C	#3	CELL F	#3	CELL D
				· · · · · ·	#4	CELL B
Ì					#5 .	CELL E
	CELL	CELL INFO.	CELL ID	CELL INFO.	CELL ID	CELL INFO.
	CI_SRP #m=3	CI #n=3	CI_SRP #m=3	CI #n=3	C1_SRP #m = 5	CI #n=4

FIG. 7B

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NUMBER OF VOB IN VTS OR PLAY LIST SEARCH POINTER TABLE INFO. (PL_SRPTI) 1756 1ST VOB ID IN VOB SEQ. OR 1ST PLAY LIST SEARCH POINTER (PL_SRP#1) 1757 PLAY LIST 2ND VOB_ID IN VOB SEQ. SEARCH POINTER OR 2ND PLAY LIST SEARCH TABLE POINTER (PL_SRP#2) 1758 (PL SRPT) VIDEO nTH VOB_ID IN VOB SEQ. MANAGER INFO. OR nTH PLAY LIST SEARCH **MANAGEMENT** POINTER (PL_SRP#n) TABLE (VMGI_MAT) RTR VIDEO MANAGER VTSI 1106 INFO. (RTR_VMGI) (RTR_VMGI) <u>은</u> MOVIE AV FILE INFO. VTS GENERAL TABLE (M_AVFIT) INFO. 1751 STILL PICTURE AV FILE RTR_VMG VOB SEQUENCE INFO. TABLE (S_AVFIT) INFO. 1752 ORIGINAL PGC INFO. PTT INFO. (ORG_PGCI) DATA 1753 USER DEFINED PGC VTS TIME MAP NAVIGATION INFO. TABLE (UD_PGCIT) **TABLE 1754** TEXT DATA MANAGER (TXTDT_MG) MANUFACTURER'S INFO. TABLE (MNFIT)

F16.9A				AV F	AV FILE 1401	-			
F16.9B				VTS (OR RTR_MOV. VRO) 1402	R_MOV. VR	1405			
	V0B#1 1461	> -	V0B#2 1462) T	V0B#3 1763		UNRE	UNRECORDED AREA 1460
F16.90	EXTENT# a 1471		EXTENT# /3 1472	EXTENT# γ 1473		EXTENT# 8 1474	EXTENT# ¢		EXTENT# ζ 1470
FIG. 9D				AV	AV FILE 1401	_			
F16.9E		VTS (0	R RTR_MOV	. VRO/RTR	STO. VRC	/RTR_STA	VTS (OR RTR_MOV. VRO/RTR_STO. VRO/RTR_STA. VRO) 1402	2	
		#			#190\	#19			
	V0B#A 1771	V0B#B 1772	V0B#C 1773	V0B#D 1774	V0B#E 1775	V0B#F 1776	V0B#G 1777	V0В#Н 1778	V0B#1 1779
	VIDEO OBJECTS	S	AUD 10 0BJECTS	PICTURE 0BJECTS	据 ST	AUD10 0BJECTS	0 CTS	THUMBNA!!	VAIL TS
FIG OF	1012		1014	1013	,	1014		1016	
5		R_MOV. VRO-		RTR_STO. VRO-	0. VR0	l l	-RTR_STA. VRO-+		
	RTR_STA	R_STA. VRO ~							

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FIG. 10A	VOB FOR P	ICTURE OBJEC	FIG. 10A VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1631	IRE VOB GROUP RE	LATING TO S	V0G1#) 1631
FIG. 10B			VOBU (FOR ONE STILL PICTURE) 1641	ILL PICTURE) 164	11	
•						
	V_PCK	V_PCK	V_PCK	SP_PCK	A_PCK	A_PCK
•	1991	1662	1663	1681	1691	1692
F16. 100	:	I-PICTURE 1706	DUMMY DATA	SP_STREAM	A_STREAM	A_STREAM
			-VIDEO PART		AUDIO PART	PART

F16.	10D	FIG. 10D VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1632	ے ا	TURE OB.	JECTS	(S)	STILL	PIC!	표	£ £	OUP F	ELAT	ING T	0 S_\	98	t) 1632	
F16.	10E	FIG. 10E VOBU (ONE STILL PICT.) 1642	E ST	ILL PICT	r.) 16⁄	12	VO	VOBU 1643	43					VOBL	VOBU 1644	44	·
FIG. 10F V-PCI 1664	10F	V_PCK 1664		SP_PCK A_PCK V_PCK 1682 1693 1665	A_PC 1693	A_PCK	V_PCK 1665		A_PCK V_PCK 1694 1666	 	V_PCK 1666		V_160	V_PCK 1667		A_PCK 1695	

FIG 10G VOB FOR PIG	VOB FOR	PICTURE	OBJECTS	(OR STILL	PICTUR	CTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1633	JP RELATI	NG TO	\$) 1633
FIG. 10H	VOBU (ONE		STILL PICTURE) 1645	.) 1645		V0BU 1646			V0BU 1647	647
	V_PCK 1668	V_PCK 1669	v_PCK 1670	SP_PCK 1683	V_PCK 1671	V_PCK 1672	V_PCK 1673		V_PCK 1674	
FIG. 101	I-PICTURE	URE 1707	DUMMY 1704	SP_ STREAM	I-PICT	I-PICTURE 1708	DUMMY 1705		I-PICTURE 1709	E 1709
		VIDEO PART	PART			VIDEO PART			←-VIDEO PART→	PART -
FIG. 10J VOB FOR PI	VOB FOR		OBJECTS (OR STILL	PICTUR	CTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#)	JP RELATII	NG T0	\$_V0G1) 1634
FIG. 10K VOBU (ONE	VOBU (STILL PICTURE) 1648	1648	NOE	VOBU 1649			V0BU 1650	650
FIG. 10L	SP_PCK 1684	A_PCK 1696	A_PCK /	A_PCK / 1698	A_PCK / 1699	A_PCK A_1700 17	A_PCK		A_PCK 1702	, , , ,
		AUDIO PART	PART —		AUC	AUDIO PART—			←—AUDIO PART→	PART-

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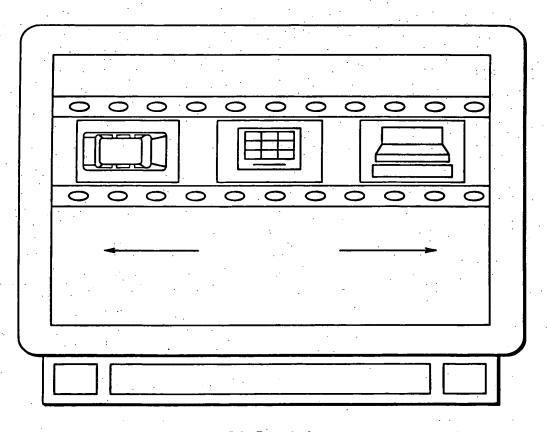


FIG. 11

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STILL PICTURE AV FILE (S AVFIT)

STILL PICTURE AV FILE INFO. TABLE INFO. (S_AVFITI)

STILL PICT, VOB STREAM INFO. #1 (S_VOB_STI#1)

STILL PICT. VOB STREAM INFO. #n (S_VOB_STI#n)

STILL PICTURE AV FILE INFO. (S_AVFI)

STILL PICT. AD-DITIONAL AUDIO STREAM INFO. #1 (S_AA_STI#1)

STILL PICT. AD-DITIONAL AUDIO STREAM INFO. #m (S_AA_STI#m)

STILL PICTURE ADDITIONAL AUDIO FILE INFO. (S AAFI)

VOB INFO. FOR PICT. OBJECTS MANAGEMENT INFO. 1721 (OR S_AVFI_GI) SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #1 1726 (OR S VOGI SRP#1) SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #i 1727 (OR S VOGI SRP#i)

SEARCH POINTER OF VOB INFO. FOR PICT. OBJECTS #k 1728 (OR S_VOGI_SRP#k)

VOB INFO. FOR PICT. OBJECTS #1 1731 (OR S_VOGI#1)

VOB INFO. FOR PICT. OBJECTS #i 1732

(OR S_VOGI#i)

VOB INFO. FOR #k 1733 (OR S_VOGI#k)

PICT. OBJECTS

VOB GENERAL INFORMATION FOR PICTURE **OBJECTS** 1736 (OR STILL PICTURE VOB GROUP GENERAL INFO. S VOG GI)

VOB ATTRIB. INFORMATION FOR PICTURE **OBJECTS** 1737

VOBU MAP FOR PICTURE **OBJECTS** 1738 (OR STILL PICTIRE **VOB ENTRES** S_VOB_ENT#)

FIG. 12 #i=ANY ONE OF #1 TO #k

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VOB ATTRIB. INFO. FOR PICT. OBJ. 1737 VOBU MAP FOR PICT. OBJ. 1738

 $(S_VOB_$

ENT#)

VOB GENERAL INFO. 1736 OR S_VOG_ GI STILL PICT. ENTRY TYPE (S_VOB_ ENT_TY)

NUMBER OF

STILL PICT. (OR NUMBER OF VOBUs) IN CORRES-PONDING VOB 1801 (OR S_VOB_Ns) INFO. OF 1ST STILL PICT. IN CORRES-POND I NG VOB 1802 INFO. OF 2ND STILL PICT. IN CORRES-POND I NG VOB 1803 INFO. OF 3RD STILL PICT. IN CORRES-PONDING VOB 1804

DATA SIZE OF STILL PICTURE
(OR VOBU) INDICATED BY USED
SECTORS 1806 (OR
VIDEO PART SIZE V_PART_SZ/
AUDIO PART SIZE A_PART_SZ)
DISPLAY TIME OF ONE STILL
PICTURE 1807 REPRESENTED
BY PLAYBACK TIME OF AUDIO
PART (IF VOBU CONTAINS
A_PCK) OR REPRESENTED BY
DISPLAY TIME OF VIDEO PART
(IF VOBU CONTAINS NO A_PCK)

ADDRESS OF 1ST V_PCK IN VOBU 1808 (OR S_VOG_SA)

SIZE OF I-PICTURE IN VOBU
(INDICATED BY TOTAL BYTES)
1809

PRESENTATION START TIME S_PTM OF STILL PICTURE (V_PCK/SP_PCK) 1810

1ST SYSTEM CLOCK REFERENCE F_SCR OF STILL. PICTURE (V_PCK/SP_PCK) 1811

ADDRESS OF 1ST A_PCK IN VOBU 1812

AUDIO S_PTM (PRESENTATION START TIME OF A_PCK) 1813

AUDIO E_PTM (PRESENTATION END TIME OF A_PCK) 1814

AUDIO F_SCR (SYSTEM CK REF. OF 1ST A_PCK IN VOBU) 1815

AUDIO L_SCR (SYSTEM CK REF. OF LAST A_PCK IN VOBU) 1816

PLAYBACK TIME OF AUDIO PART A_PB_TM Oblon, Spivak, et al.
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				-			
FIG. 14A		>	VOB #A 1821		•		- 1
	V0BU 1825	V0BU 1826	26		NOBI	V0BU 1827	<u> </u>
FIG. 14B	STILL PICT. NO. 1	STILL PICT. NO.	NO. 2		STILL P	STILL PICT. NO. h	
	STLPCT AUDIO	STLPCT	AUD10 S	STLPCT	STLPCT	AUD10	<u> </u>
	1831 1841	1832	1842 1	1833	1834	1843	
E10, 110	×		A_PCK	V_PCK	V_PCK	A_PCK	
7.0.7	1921 1921	1852 1848	1862	1853	1854	1863	_
	CONTENTS	1ST STILL PICT	7.		[ASI	CELL PICT.	
	SPECIFIED BY CELL		A_PCK	V_PCK	V_PCK	1	
716.14D		1852 1848	11865	1853	1854	1866	\neg
	A PCK	V PCK A PCK	V PCK	V PCK	A PCK	A PCK	
	1864	1855	_	1857		1858	
	AUD10	STLPCT AUDIO	STLPCT	STLPCT	AUD 10	STLPCT	
F16.14E	1844	1835 1845	1836	1837	1846	1838	
		STILL PICTURE		STILL PICTURE	ICTURE		
. •		NO. j		NO. h+j-2	-2		
FIG. 14F		V0BU 1828		V0BU 1829	1829		
F16, 146		 >	V0B #B 1822				
)							7

CONTENTS (S_CI) OF CELL PLAYBACK INFO. (CI) FOR PICTURE OBJECTS 1870	EXAMPLE 1871 WITH RESPECT TO FIG.14	EXAMPLE 1872 WITH RESPECT TO FIG.14
CELL ID (CI_SRP) 1873		
TYPE INFORMATION OF CELL (C_TY) 1880	-	<u></u>
ID INFORMATION OF VOB WITH V_PCK 1874	VOB #A	1821
STILL PICT. NUMBER 1875 IN VOB INCLUDING V_PCK OF 1ST STILL PICTURE IN CELL (S_S_VOB_ENTN)	2	1826
STILL PICT. NUMBER 1876 IN VOB INCLUDING V_PCK OF LAST STILL PICTURE IN CELL (E_S_VOB_ENTN)	h	1827
ID INFORMATION OF VOB WITH A_PCK 1877	VOB #B	1822
STILL PICT. NUMBER 1878 IN VOB INCLUDING A_PCK OF 1ST STILL PICTURE IN CELL	j	1828
PRESENTATION TIME 1879 OF EACH STILL PICTURE HAVING NO CORRESPONDING A_PCK	2 SECONDS (ONE LINE)	

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CONTENTS OF CELL PLAYBACK INFO. (CI) FOR PTT
CELL ID (CI_SRP) 1883
TYPE INFO. OF CELL (C_TY) 1882
ID INFO. OF PTT WITH V_PCK 1884
STILL PICTURE NUMBER 1885 IN PTT OF VOB INCLUDING V_PCK OF 1ST STILL PICTURE IN CELL
STILL PICTURE NUMBER 1886 IN PTT OF VOB INCLUDING V_PCK OF LAST STILL PICTURE IN CELL
ID INFO. OF PTT WITH A_PCK 1887
STILL PICTURE NUMBER 1888 IN PTT OF VOB INCLUDING A_PCK OF 1ST STILL PICTURE IN CELL
PRESENTATION TIME 1889 OF EACH STILL PICT. HAVING NO CORRESPONDING A_PCK

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STILL PICTURE AV FILE INFO. (S_AVFI) FOR PTT (CHAPTER)

PTT INFO. FOR PICT. OBJECTS MANAGEMENT INFO. 1891

SEARCH POINTER
OF PIT INFO. FOR
PICT. OBJECTS
#1 1892

SEARCH POINTER
OF PIT INFO. FOR
PICT. OBJECTS
#2 1893

PTT INFO. FOR PICT. OBJECTS #1 1895

PTT INFO. FOR PICT. OBJECTS #2 1896

PTT GENERAL INFORMATION FOR PICTURE OBJECTS 1898

VOB MAP FOR PICTURE OBJECTS 1899

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VOB MAP FOR PICT. OBJECTS 1899

NUMBER OF STILL PICT. (OR NUMBER OF VOBs) IN CORRESPONDING PTT 1901 (OR S_VOB_Ns)

INFO. OF 1ST STILL PICT. IN CORRESPONDING PTT 1902

INFO. OF 2ND STILL PICT. IN CORRESPONDING PTT 1903 DATA SIZE OF STILL PICTURE (OR VOB) INDICATED BY USED SECTORS 1906

DISPLAY TIME OF ONE STILL
PICTURE 1907 REPRESENTED
BY PLAYBACK TIME OF AUDIO
PART (IF VOB CONTAINS
A_PCK) OR REPRESENTED BY
DISPLAY TIME OF VIDEO PART
(IF VOB CONTAINS NO A_PCK)

ADDRESS OF 1ST V_PCK IN VOB 1908 (OR S_VOG_SA)

SIZE OF I-PICTURE IN VOB (INDICATED BY TOTAL BYTES) 1909

PRESENTATION START TIME S_PTM OF STILL PICTURE (V_PCK/SP_PCK) 1910

1ST SYSTEM CLOCK REFERENCE F_SCR OF STILL. PICTURE (V_PCK/SP_PCK) 1911

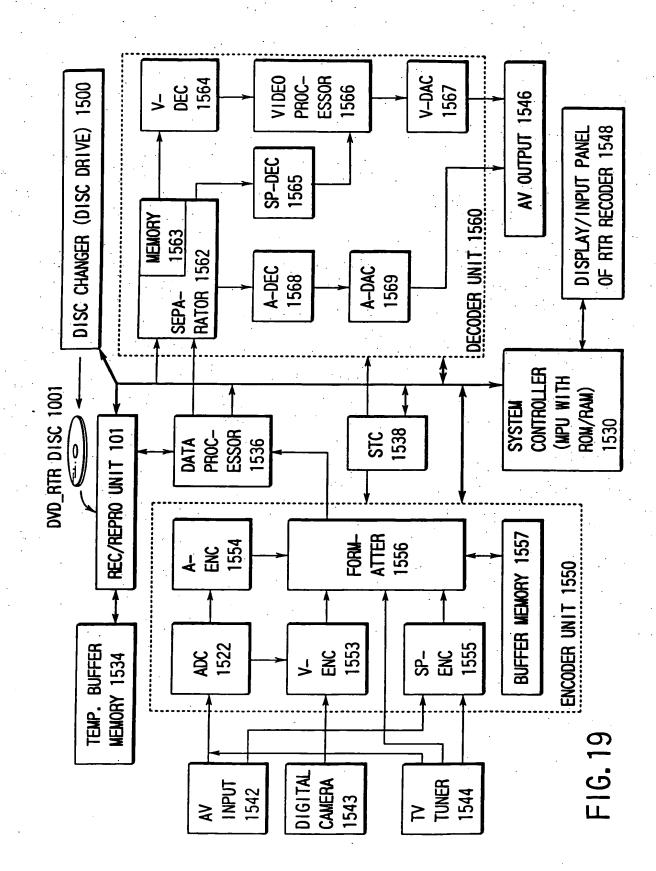
ADDRESS OF 1ST A_PCK IN VOB 1912

AUDIO S_PTM (PRESENTATION START TIME OF A_PCK) 1913

AUDIO E_PTM (PRESENTATION END TIME OF A_PCK) 1914

AUDIO F_SCR (SYSTEM CK REF. OF 1ST A_PCK IN VOB) 1915

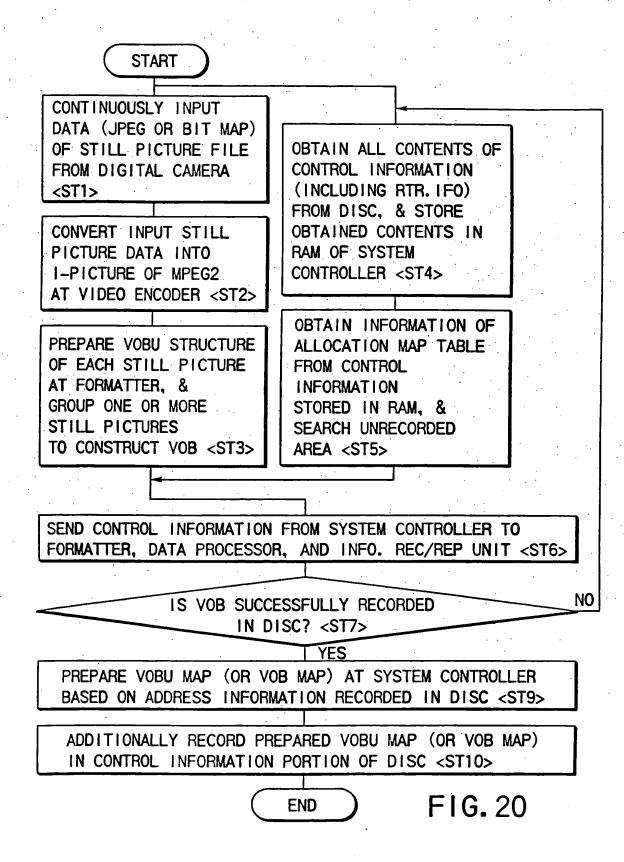
AUDIO L_SCR (SYSTEM CK REF. OF LAST A_PCK IN VOB) 1916



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START

OBTAIN ALL CONTENTS OF CONTROL INFORMATION (RTR. 1FO) FROM DISC, & STORE OBTAINED CONTENTS IN RAM OF SYSTEM CONTROLLER <ST11>

OBTAIN PLAYBACK CONTROL INFO. FROM CONTROL INFO. STORED IN RAM, & INTERPRETE OBTAINED INFORMATION AS TO MANNER OF REPRODUCTION <ST12>

SEARCH PROGRAM TO BE REPRODUCED BASED ON PGC CONTROL INFO. IN RAM, OBTAIN CELL(S) IN PGC INFORMATION OF SEARCHED PROGRAM, & OBTAIN VOB_ID OR PTT_ID SPECIFIED BY CORRESPONDING CELL FROM CELL PLAYBACK INFORMATION STORED IN RAM <ST13>

OBTAIN DISC ADDRESS OF VOB TO BE REPRODUCED BASED ON VOB INFORMATION OR PTT INFORMATION STORD IN RAM <\$T14>

ACCESS VOB RECORDED IN DISC BASED ON CONTROL SIGNAL FROM SYSTEM CONTROLLER TO REPRODUCE INFORMATION OF VOB, & PROVIDE REPRODUCED INFORMATION AS AV OUTPUT FOR DISPLAY <ST18>

RECEIVE ADDITIONAL INFO. INPUT BY USER WHILE DISPLAYING AV OUTPUT, & GROUP ONE OR MORE STILL PICTURES AT FORMATTER BASED ON USER-INPUT INFORMATION TO PREPARE VOB OR PTT <ST19>

RECORD INFORMATION OF VOB PREPARED BY FORMATTER <ST20>

END

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START

OBTAIN ALL CONTENTS OF CONTROL INFORMATION (RTR. 1FO) FROM DISC. & STORE OBTAINED CONTENTS IN RAM OF SYSTEM CONTROLLER <ST11>

OBTAIN PLAYBACK CONTROL INFO. FROM CONTROL INFO. STORED IN RAM, & INTERPRETE OBTAINED INFORMATION AS TO MANNER OF REPRODUCTION <ST12>

SEARCH PROGRAM TO BE REPRODUCED BASED ON PGC CONTROL INFO. IN RAM, OBTAIN CELL(S) IN PGC INFORMATION OF SEARCHED PROGRAM, & OBTAIN VOB_ID OR PTT_ID SPECIFIED BY CORRESPONDING CELL FROM CELL PLAYBACK INFORMATION STORED IN RAM <ST13>

OBTAIN DISC ADDRESS OF VOB TO BE REPRODUCED BASED ON VOB INFORMATION OR PTT INFORMATION STORD IN RAM <\$T1.4>

ACCESS VOB RECORDED IN DISC BASED ON CONTROL SIGNAL FROM SYSTEM CONTROLLER TO REPRODUCE INFORMATION OF VOB, & PROVIDE REPRODUCED INFORMATION AS AV OUTPUT FOR DISPLAY <ST18>

ACCESS VOB #A RECORDED IN DISC TO PROVIDE STILL PICTURE INFORMATION OF VOB #A <ST16>

ACCESS VOB #B IN DISC TO REPRODUCE AUDIO INFORMATION OF VOB #B, & PROVIDE AUDIO INFO. OF VOB #B AND STILL PICTURE INFO. OF VOB #A AS AV OUTPUT FOR STILL PICTURE DISPLAY WITH SOUND <ST17>

END

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USER DEFINED PGC INFO. TABLE INFORMATION (UD_PGCITI) RTR_VMG USER DEFINED PGCI SEARCH RTR VIDEO MANAGER POINTER #1 (UD_PGCI_SRP#1) INFO. (RTR_VMGI) MOVIE AV FILE INFO. USER DEFINED PGCI SEARCH TABLE (M_AVFIT) POINTER #n (UD_PGCI SRP#n) STILL PICTURE AV USER DEFINED PGC INFO. #1 FILE INFO. TABLE (UD_PGCI#1) (S_AVFIT) ORIGINAL PGC INFORMATION USER DEFINED PGC INFO. #n (ORG_PGCI) (UD_PGCI#n) USER DEFINED PGC CONTENTS OF PGCI (ORIGINAL INFORMATION TABLE PGCI OR USER DEFINED PGCI) (UD_PGCIT) PGC INFORMATION #i (PGCI#i) TEXT DATA MANAGER PGC GENERAL INFO. (PGC GI) (TXTDT_MG) PROGRAM INFO. #1 (PGI#1) MANUFACTURER'S INFO. TABLE (MNFIT) PROGRAM INFO. #m (PGI#m) START ADDRESS OF CELL INFO. SEARCH POINTER #1 CELL INFO. (CI_SA) (CI_SRP#1) CELL INFO. SEARCH POINTER #n MOVIE CELL INFO. (CI_SRP#n) (M CI) CELL INFO. #1 (CI#1) OR STILL PICTURE CELL INFO. #n (CI#n) CELL INFO. (S_CI)

FIG. 23

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STILL PICTURE CELL INFO. (S_CI)

STILL PICTURE CELL GENERAL INFORMATION (S_C_GI)

STILL PICT. CELL ENTRY POINT INFORMATION #1 (S_C_EPI#1)

STILL PICT. CELL ENTRY POINT INFORMATION #n (S_C_EPI#n)

FIG. 24

CONTENTS OF S_C_GI

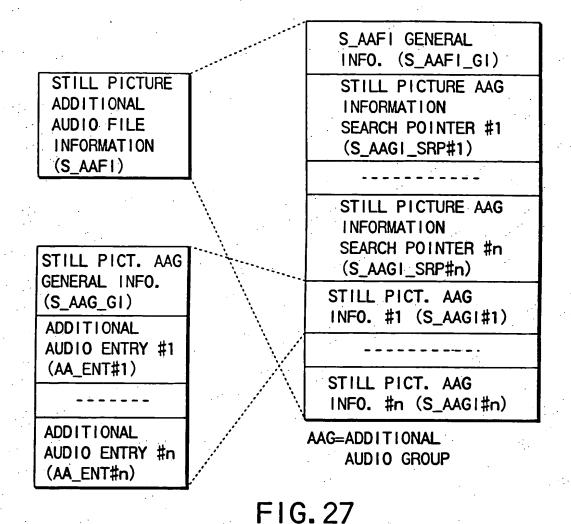
FIELD NAME	CONTENTS	
RESERVED	RESERVED	
C_TY	CELL TYPE	
S_VOGI_SRPN	S_VOGI SEARCH POINTER NUMBER	
C_EPI_Ns	NUMBER OF CELL ENTRY POINT INFO.	
S_S_VOB_ENTN	START S_VOB_ENT NUMBER	
E_S_VOB_ENTN	END S_VOB_ENT NUMBER	

FIG. 25

CONTENTS OF S_C_EPI

FIELD NAME	CONTENTS
EP_TY	ENTRY POINT TYPE
S_VOB_ENTN	S_VOB_ENT NUMBER
PRM_TXT1	PRIMARY TEXT INFORMATION

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CONTENTS OF S_AAG_GI

FIELD NAME	CONTENTS
AA_ENT_Ns	NUMBER OF AA_ENT
S_AA_STIN	STILL PICTURE ADDITIONAL AUDIO STREAM INFORMATION NUMBER
S_AAG_SA	START ADDRESS OF THIS AAG IN STILL PICTURE ADDITIONAL AUDIO FILE

CONTENTS OF AA_ENT

FIELD NAME	CONTENTS
AA_TY	ADDITIONAL AUDIO TYPE
AA_SZ	SIZE OF ADDITIONAL AUDIO STREAM
AA_PB_TM	PLAYBACK TIME OF ADDITIONAL AUDIO STREAM (MEASURED BY VIDEO FIELDS)

FIG. 29

CONTENTS OF S_VOG_GI

FIELD NAME	CONTENTS
S_VOB_Ns	NUMBER OF S_VOBs
S_VOB_STIN	STILL PICTURE VOB STREAM INFORMATION NUMBER
FIRST_VOB_REC_TM	TIME WHEN THE FIRST VOB IN THIS VOB GROUP WAS RECORDED
LAST_VOB_REC_TM	TIME WHEN THE LAST VOB IN THIS VOB GROUP WAS RECORDED
S_VOG_SA	START ADDRESS OF THIS VOB GROUP IN STILL PICTURE AV FILE

FIG. 30

CONTENTS OF S_VOB_ENT (TYPE 1)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART

CONTENTS OF S_VOB_ENT (TYPE 2)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
A_PART_SZ	SIZE OF ORIGINAL AUDIO PART
A_PB_TM	PLAYBACK TIME OF AUDIO PART (DESCRIBED IN VIDEO FIELDS)

FIG. 32

CONTENTS OF S_VOB_ENT (TYPE 3)

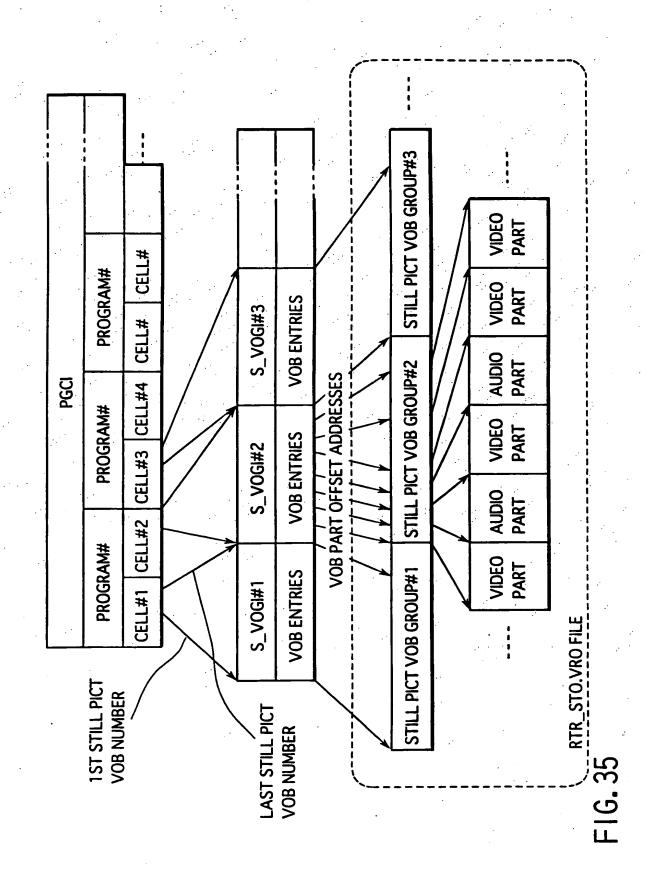
FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
S_AAGN	ADDITIONAL AUDIO GROUP NUMBER
AA_ENTN	AA_ENT NUMBER

FIG. 33

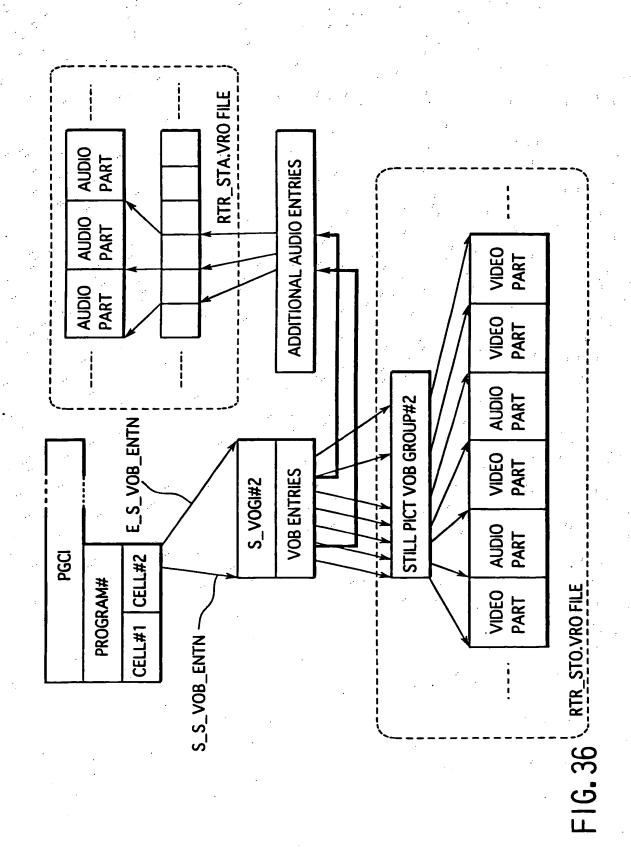
CONTENTS OF S_VOB_ENT (TYPE 4)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
A_PART_SZ	SIZE OF ORIGINAL AUDIO PART
A_PB_TM	PLAYBACK TIME OF AUDIO PART
S_AAGN	ADDITIONAL AUDIO GROUP NUMBER
AA_ENTN	AA_ENT NUMBER

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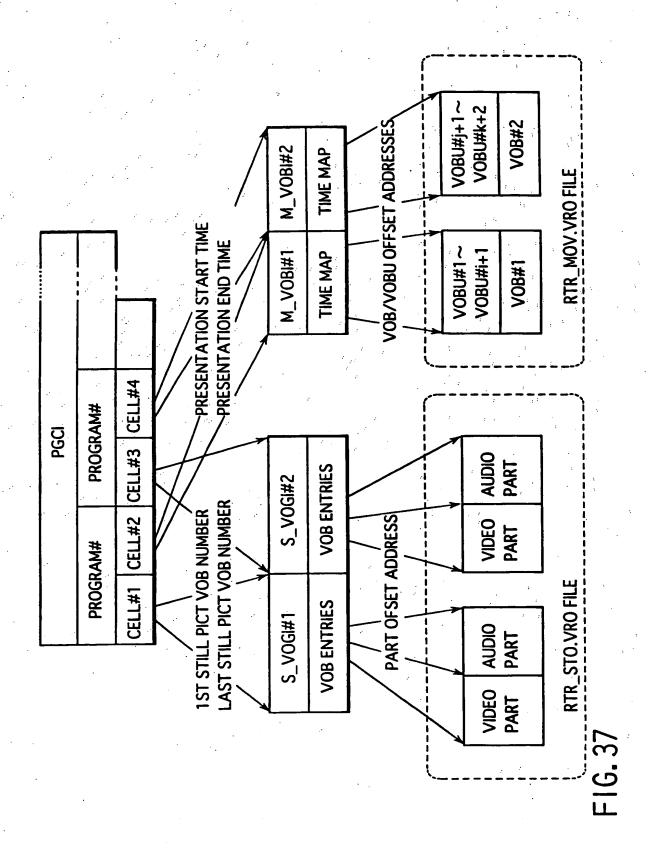
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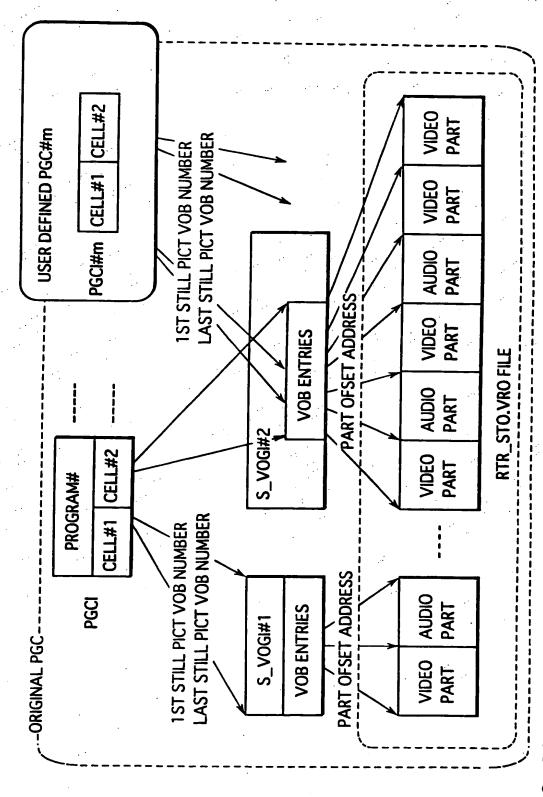
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